|                                    | 9  |   |   |   |   |  |  |  |  |  |  |
|------------------------------------|--|---|---|---|---|--|--|--|--|--|--|
|                                    | 919  | UTILITY   | Attorney Do   | ocket No.   | 136240  |  |  |  |  |  |  |
|                                    | •  | IT APPLICATION  | First Invente   | or  | Alan Thomas Sch   | nachtely   |  |  |  |  |  |
|                                    | S PTC  | ANSMITTAL   | Title   | Methods and<br>Machinery  |   | toring and Diagnosing  |  |  |  |  |  |
|                                    |  | rovisional applications under 37 CFR<br>1.53(b)   | Express Ma  | ail Label No.   | EL977939160   |  |  |  |  |  |  |
|                                    |  | ATION ELEMENTS  concerning utility patent application   | ADDRESS   | ation $0.00$ ts $0.00$  |   |  |  |  |  |  |  |
| <ol> <li>2.</li> <li>3.</li> </ol> | (Submit an or Applicant clai See 37 CFR 1.  Specification (preferred arrange - Descriptive t - Cross Refere - Statement Re - Reference to or a compute - Background - Brief Summa - Brief Descrip - Detailed Des   | [Total Pages 30]  ement set forth below)  title of the invention ence to Related Applications tegarding Fed sponsored R & D o sequence listing, a table, ter program listing appendix of the Invention tary of the Invention iption of the Drawings (if filed)  | 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. paper  c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  9. Assignment Papers (cover sheet & document(s)) [9 pages] |   |   |  |  |  |  |  |  |
| or<br>Fo                           | - Claim(s) - Abstract of the A | the Disclosure  35 U.S.C. 113) [Total Sheets 5]  For of Attorney [Total Pages 5]  Executed (original or copy)  Form a prior application (37 CFR 1.63 (d))  Stinuation/divisional with Box 17  DELETION OF INVENTOR(S)  Signed statement attached deleting inventor(s)  Form and in the prior application, see 37 CFR  1.63(d)(2) and 1.33(b).  Data Sheet. See 37 CFR 1.76  FOR APPLICATION, check appropriate  Data Sheet under 37 CFR 1.76:  Divisional Continuation:  Examiner  Examiner  Examiner  Examiner  The DIVISIONAL APPS only: The entire disclose the accompanying continuation or divisional attently omitted from the submitted application of the secompanying continuation or divisional attently omitted from the submitted application | 11. English 12. Informa (IDS)/F 13. Prelimin 14. Return I 15. Certifier (if forei 16. Non Pul (b)(2)(E 17. Other:  te box, and supply in-part (CIP)  Source of the prior application and is he  | h Translation Documnation Disclosure Star PTO-1449  nary Amendment Postcard (MPEP 503  ed Copy of Priority Dign priority is claimed ablication Request until B)(i). Applicant must be applicated of prior application Group Art Until pplication, from which hereby incorporated by | nent (if applicable) stement Copies  3) (Should be specifically Document(s) ed) nder 35 U.S.C. 122 st attach form PTO/SB/35  cormation below and in sion No.: | i/35 or its equivalent.  In a preliminary amendment,  s supplied under Box 5b, is considered |  |  |  |  |  |
|                                    | Customer Number  | or Bar Code Label   | 23465 Customer No. or Attach be   |   | or - Cor  | rrespondence address below   |  |  |  |  |  |
| N.                                 | lame   | John S. Beulick   |   | , , ,   |   |  |  |  |  |  |  |
|                                    |  | <u> </u>  |   |   |   |  |  |  |  |  |  |
| A                                  | ddress   | Armstrong Teasdale LLP One Metropolitan Square, Suite   |   | 600   |   |  |  |  |  |  |  |
|                                    | ity  | St. Louis   | State   | мо  | Zip Code  | 63102  |  |  |  |  |  |
|                                    | Country  | US  |   | 314.621.5070  | Fax   | 314.621.5065   |  |  |  |  |  |
|                                    | lame (Print/Type)  | William J. Zychlewicz   | 1   | No. (Attomey/Age  |   | 51,366   |  |  |  |  |  |
|                                    | ignature   | VV SALAGRAM US REST VALUE IV AUG  | Incgionation .  | O. Patomojing   | Date  | April 22, 2004   |  |  |  |  |  |
| I c<br>se<br>P.(                   | Certificate of Express Mail  I certify that the documents listed on this form are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.  |   |   |   |   |  |  |  |  |  |  |
| AA                                 | /illiam J. Zychle  | 3WICZ   | $1 \omega \lambda \lambda \lambda \nu \nu$  | NO AM   |   | April 22, 2004   |  |  |  |  |  |

(Signature of Person Mailing Correspondence)

Date

(Printed Name of Person Mailing Correspondence)

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| FEE TRANSM  | ITTAI       | Complete if Known   |                      |              |                |                        |                               |  |          |  |
|---|-------------|---|----------------------|--------------|----------------|------------------------|-------------------------------|--|----------|--|
| FEE IRANSIM   | IIIAL       | - L   | Application Number   |              |                |                        |                               |  |          |  |
| for FY 200  | 1           | L   | Filing Date          |              | April 22, 2004 |                        |                               |  |          |  |
| Effective 10/01/2003. Patent fees are subject to  |             |   | First Named Inventor |              | ntor           | Alan Thomas Schachtely |                               |  |          |  |
|   |             | Examiner Name   |                      |              |                |                        |                               |  |          |  |
| Applicant claims small entity status. See 37  | CFR 1.27    | Art Unit  |                      |              |                |                        |                               |  |          |  |
| TOTAL AMOUNT OF PAYMENT (\$) 1  | ,630.00     | Attorney Docket No.   |                      |              |                | lo.                    | 136240                        |  |          |  |
| METHOD OF PAYMENT (check all that   | apply)      | FEE CALCULATION (continued)   |                      |              |                |                        |                               |  |          |  |
| Check Credit card Money Other   | er None     | 3. ADDITIONAL FEES  |                      |              |                |                        |                               |  |          |  |
| Deposit Account:  | l -         | Large Entity   Small Entity   |                      |              |                |                        |                               |  |          |  |
| Denosit   |             | Fee<br>Code   | Fee<br>(\$)          | Fee<br>Code  | Fee<br>(\$)    |                        | Fee D                         | escription                                     | Fee Paid |  |
| Account<br>Number   | 1 8         | 1051  | 130                  | 2051         |                | Surch                  | arge - late                   | filing fee or oath                             |          |  |
| Deposit Account Armstrong Teasdale LLP  |             | 1052  | 50                   | 2052         | 25             |                        | arge - late<br>sheet          | provisional filing fee or                      |          |  |
| Name The Director is authorized to: (check all that apply)                                    |             | 1053  | 130                  | 1053         | 130            |                        | English spe                   | cification                                     |          |  |
|   | verpayments | 1812  | 2,520                | 1812 2       | 2,520          | For fili               | ing a reque                   | st for ex parte reexamination                  | <b>—</b> |  |
| Charge any additional fee(s) or any underpayment of   | fee(s)      | 1804  | 920*                 | 1804         | 920*           |                        | esting publi<br>iner action   |  |          |  |
| Charge fee(s) indicated below, except for the filing to the above-identified deposit account. | fee         | 1805  | 1,840*               | 1805         | 1,840*         | Reque<br>Exam          | esting publ                   | ication of SIR after                           |          |  |
| FEE CALCULATION   |             | 1251  | 110                  | 2251         | 55             | Exten                  | nsion for rep                 | oly within first month                         |          |  |
| 1. BASIC FILING FEE   |             | 1252  | 420                  | 2252         | 210            | Exten                  | nsion for re                  | ply within second month                        | $\vdash$ |  |
| Large Entity Small Entity   |             | 1253  | 950                  | 2253         | 475            | Exten                  | nsion for rep                 | ply within third month                         |          |  |
| Fee Fee Fee Fee Fee Description  Code (\$) Code (\$)  | Fee Paid    | 1254  | 1,480                | 2254         | 740            | Exten                  | nsion for rep                 | ply within fourth month                        |          |  |
| 1001 770 2001 385 Utility filing fee  | 770.        | 1255  | 2,010                | 2255         | 1,005          | Exten                  | nsion for rep                 | ply within fifth month                         |          |  |
| 1002 340 2002 170 Design filing fee   |             | 1401  | 330                  | 2401         | 165            | Notice                 | e of Appea                    | l  |          |  |
| 1003 530 2003 265 Plant filing fee  |             | 1402  | 330                  | 2402         |                | _                      |                               | support of an appeal                           |          |  |
| 1004 770 2004 385 Reissue filing fee  | <b></b>     | 1403  | 290                  | 2403         | _              | -                      | est for oral                  |  |          |  |
| 1005 160 2005 80 Provisional filing fee   |             | 1451<br>1452  | 110                  | 1451<br>2452 |                |                        |                               | te a public use proceeding                     |          |  |
| SUBTOTAL (1) (\$) 7   | 70.         | 1453  |                      | 2453         |                |                        |                               | e - unintentional                              |          |  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND   | O REISSUE   | 1501  |                      | 2501         |                |                        |                               | (or reissue)                                   |          |  |
| Fee fro<br>Extra Claims below   | Fee Paid    | 1502  | 480                  | 2502         |                |                        | n issue fee                   | `  |          |  |
| Total Claims 56 -20** = 36 X 18.  |             | 1503  | 640                  | 2503         | 320            | Plant                  | issue fee                     |  |          |  |
| Independent 5 - 3** = 2 X 00.  Multiple Dependent   | 172         | 1460  | 130                  | 1460         | 130            | Petiti                 | ons to the (                  |  |          |  |
|   |             | 1807  | 50                   | 1807         | 50             | Proce                  | essing fee ι                  | under 37 CFR 1.17(q)                           |          |  |
| Large Entity   Small Entity Fee Fee Fee Fee Fee Description                                   |             |   | 180                  | 1806         |                |                        |                               | formation Disclosure Stmt                      |          |  |
| Code (\$) Code (\$)   |             | 8021  | 40                   | 8021         | 40             | Recor                  | rding each  <br>erty (times n | patent assignment per<br>number of properties) | 40.00    |  |
| 1202  | evess of 3  | 1809  | 770                  | 2809         | 385            | Filing                 | a submissi                    | ion after final rejection                      |          |  |
| 1203 290 2203 145 Multiple dependent claims in c  |             | 1810  | 770                  | 2810         | 29F            |                        | FR 1.129(a                    |  | $\vdash$ |  |
| 1204 86 2204 43 ** Reissue independen   |             | 1010  | ,,,                  | 2010         |                | exam                   | ined (37 CI                   | nal invention to be<br>FR 1.129(b))            |          |  |
| over original patent  |             | 1801  | 770                  | 2801         |                | •                      |                               | ntinued Examination (RCE)                      |          |  |
| 1205 18 2205 9 ** Reissue claims in ex<br>and over original pate                              |             | 1802 900 1802 900 Request for expedited examination of a design application |                      |              |                |                        |                               |  |          |  |
|   |             | Other   | fee (sp              | ecify) _     |                |                        |                               |  |          |  |
| **or number previously paid, if greater; For Reissues,  |             | *Redu   | ced by               | Basic F      | iling Fe       | ee Paid                | d st                          | UBTOTAL (3) (\$) 40.0                          | 0        |  |
| SUBMITTED BY (Complete (if applicable))   |             |   |                      |              |                |                        |                               |  |          |  |
| Name (Print/Type) William J. Zychlewicz   |             | Registration No. [Attorney/Agent] 51.366 Telephone 314/621-5070             |                      |              |                |                        |                               |  |          |  |
| Signature 2/11/11/11/ANX  |             | IA  | uornev/              | ндепи        | -              |                        |                               | Date   April 22 2004                           |          |  |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.